

UF Wildlife Ecology and Conservation Major
FALL 2018 Advising Sheet
Specialization: Wildlife Ecology & Conservation
Lower Division Curriculum: Semesters 1-4

Semester 1, Fall

Course Number	Title of Course	Credits	Prerequisites
BSC 2010 & 2010L	Integrated Principles of Biology I and Lab (GE-B) <i>Critical Tracking Course</i>	4	None
WIS 2920	Wildlife Colloquium – for majors/minors only <i>Taught Fall semester only</i>	1	WIE Majors & Minors
	Composition (State Core GE-C) (WR - 6,000)	3	
	Elective	2	
	Humanities (State Core GE-H)	3	
		Total = 13	

Semester 2, Spring

Course Number	Title of Course	Credits	Prerequisites
ECO 2023 or AEB 2014 or AEB 3103 (Choose One)	Principles of Microeconomics or Economic Issues, Food and You or Principles of Food and Resource Economics (All are GE-S) <i>Critical Tracking Course</i>	3-4	None
BSC 2011 & 2011L	Integrated Principles of Biology II and Lab (GE-B) <i>Critical Tracking Course</i>	4	BSC 2010 & 2010L
UF Requirement: IUF 1000	What is the Good Life? (GE-H)	3	None
STA 2023	Introduction to Statistics 1 (State Core GE-M) <i>Critical Tracking Course</i>	3	None
	Social and Behavioral Science (State Core GE-S)	3	
		Total = 16-17	

Semester 3, Fall

Course Number	Title of Course	Credits	Prerequisites
CALS Requirement: AEC 3030C	Effective Oral Communication Note: SPC 2608 will substitute	3	None
CALS Requirement: AEC 3033C	Writing for Agricultural and Natural Resources (6,000 WR – Provides 6,000 words) Note: ENC 2210 or ENC 3254 will substitute	3	
CHM 2045 & 2045L	General Chemistry I and Lab (State Core GE-B/P) <i>Critical Tracking Course</i>	4	Student must take Readiness Assessment on ISIS
	Ecology Common Requirement	3-4	
	Composition (GE-C) (WR-6,000)	3	
		Total = 16-17	

Semester 4, Spring

Course Number	Title of Course	Credits	Prerequisites
MAC 2311	Analytic Geometry and Calculus I (GE-M) <i>Critical Tracking Course</i>	4	Student must take Readiness Assessment on ISIS
SWS 3022 & 3022L	Introduction to Soils in the Environment and Lab (GE-P) <i>Taught Fall and Spring semesters</i>	4	None
WIS 3402 & 3402L	Wildlife of Florida and Lab <i>Taught Spring Semester Only</i>	4	None
	Elective	3	
		Total = 15	

UF Wildlife Ecology and Conservation Major
FALL 2018 Advising Sheet
Specialization: Wildlife Ecology & Conservation
Upper Division Curriculum: Semesters 5-8

Semester 5, Fall

Course Number	Title of Course	Credits	Prerequisites
WIS 3401	Wildlife Ecology and Management <i>Taught Fall and Spring Semesters</i>	3	BSC 2011 & 2011L
WIS 4945C	Wildlife Techniques or Geographic Information System Common Requirement	3-4	WIS 3402
	Plant Diversity and Taxonomy Common Requirement 1	3	
	Wildlife Biology Common Requirement or Focus Course 1	3-4	
	Invertebrate Biology Common Requirement	3-4	
		Total = 15-18	

Semester 6, Spring

Course Number	Title of Course	Credits	Prerequisites
WIS 3553C	Introduction to Conservation Genetics <i>Taught Spring Semester Only</i>	4	STA 2023 & Ecology
WIS 4945C	Wildlife Techniques or Geographic Information System Common Requirement	3-4	WIS 3402
	Plant Diversity and Taxonomy Common Requirement 2	3	
	Wildlife Biology Common Requirement or Focus Course 1	3-4	
		Total = 13-15	

Semester 7, Fall

Course Number	Title of Course	Credits	Prerequisites
WIS 4601C	Quantitative Wildlife Ecology <i>Taught Fall and Spring Semesters</i>	3	STA 2023 & WIS 3401
	Conservation Common Requirement or Focus Course 2	3	
	Human Dimensions Common Requirement	3	
	Natural Resource Policy Common Requirement	3	
	Focus Course 3 or Elective	3-4	
		Total = 15-16	

Semester 8, Spring

Course Number	Title of Course	Credits	Prerequisites
WIS 4501	Introduction to Wildlife Population Ecology <i>Taught Spring Semester Only</i>	3	WIS 3401, Ecology & Genetics
	Conservation Common Requirement or Focus Course 2	3-4	
	Elective or Focus Course 3	3	
	Focus Course 4	3	
	Elective	3	
		Total = 15-16	
		Grand Total = 120-127	

FALL 2018 WEC Common Requirements – All Wildlife majors, except Pre-Professional, will select courses from each of these 8 categories of common course requirements. Total common requirements taken will equal 9 courses:

Invertebrate Biology Common Requirement (choose 1)

ENY 3005 & 3005L - Principles of Entomology & Lab *taught every Fall, Spring, and Summer C semester, Lecture is online only, lab is field-based; lecture AND lab must be taken by WEC majors.*

ENY 4210 - Insects and Wildlife *taught online only every Fall, Spring & Summer C semester; ENY 4210L (the lab) is NOT required for WEC majors*

ZOO 4205C - Invertebrate Biodiversity *taught spring only. Note: ZOO 4205C has replaced ZOO 2203C which is no longer offered at UF. Students who took ZOO 2203C may use it in place of ZOO 4205C.*

Any course focusing on invertebrate biology that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Ecology Common Requirement (choose 1)

FOR 3153C - Forest Ecology *taught Fall & Spring semester; see Kristina Haselier in Forestry to be registered.*

PCB 3601C - Plant Ecology *taught Spring semester only*

PCB 4043C - General Ecology (GE-B) *taught Fall & Spring semesters*

WIS 3404 – Natural Resource Ecology *course is online, taught Fall only; see Claire Williams in WEC to be registered*

Note: this course was formerly WIS 4934 Natural Resource Ecology and it counts if you took it as WIS 4934.

Any course focusing on general ecology that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Geographic Information Common Requirement (choose 1)

FOR 3434C - Forest Resources Information Systems *taught Summer B semester only*

URP 4273 - Survey of Planning Information Systems *taught every Fall, Spring and Summer A semester*

GIS 3072C (formerly SUR 3393 & 3393L) - Geographic Information Systems & Lab *taught Fall semester only*

GIS 3043 - Foundations of Geographic Information Systems *taught every Fall, Spring and Summer A semester*

Any course focusing on geographic information systems and their use that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Plant Diversity & Taxonomy Common Requirement (choose 2)

BOT 2011C - Plant Diversity *taught Spring semester only*

BOT 2710C - Practical Plant Taxonomy *taught Fall semester only*

BOT 3151C - Local Flora of North Florida *taught Fall and Summer A semesters only*

FNR 3131C - Dendrology/Forest Plants *taught Fall semester only*

ORH 3513C - Environmental Plant Identification and Use *taught Fall and Summer C semesters only*

Any course focusing on plant diversity and taxonomy that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Wildlife Biology Common Requirement (choose 1)

ZOO 4307C Vertebrate Biodiversity *taught Fall and Spring semesters. Note: ZOO 4307C has replaced ZOO 2303C which is no longer offered at UF. Students who took ZOO 2303C may use it in place of ZOO 4307C.*

WIS 4934/ZOO 4926 – Mammalogy *not taught on a predictable schedule*

WIS 4934 Large Mammal Ecology and Management, *taught Spring semester of even years*

ZOO 4427C - Avian Biology *taught Spring semester only*

ZOO 4926 – Herpetology *(usually offered Spring semester of odd years)*

Any course focusing on the biology of birds, mammals, reptiles, and/or amphibians that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Human Dimensions Common Requirement (choose 1)

FNR 4070C - Environmental Education Program *taught Fall semester of odd years*

FOR 3202 - Society and Natural Resources *taught Spring semester only*

FOR 4664 - Sustainable Ecotourism Development *taught Fall semester only*

WIS 4523 - Human Dimension of Natural Resource Conservation *taught Fall semester only*

Any course focusing on the human dimensions of natural resource conservation that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Natural Resource Policy Common Requirement (choose 1)

ECP 3302 - Environmental Economics & Resource Policy

FNR 4660 - Natural Resource Policy & Administration *taught Fall semester only*

Any course focusing on natural resource policy that is approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Conservation Common Requirement (choose 1)

WIS 4554 - Conservation Biology *taught Fall semester only*

WIS 4203C - Landscape Ecology & Conservation *taught Spring semester only*

These are capstone courses. No substitutions are permitted

FALL 2018 WEC Focus Area and Courses - All Wildlife majors, except Preprofessional, must select a Focus Area. Select from *Ecology, Management, Human Dimensions, Quantitative, TWS Certification, Cooperative Education, or Urban & Regional Planning (Dual Degree Program)*:

Four approved focus courses (≥ 12 credits) must be successfully completed within the selected Focus Area. Courses used to fulfill WEC Common Requirements and other requirements may not be counted again as Focus Courses. All students must file a plan of study for Focus Area courses with WEC Student Services (102 Newins-Ziegler Hall) before completing 60 credit hours in the major. The plan must be approved by both the student's faculty advisor and the Undergraduate Program Coordinator, (Dr. Steve Johnson). Course substitutions to the plan must also be approved by the Undergraduate Program Coordinator.

Approved Focus Courses in Ecology – you are responsible for researching when your focus course choices are offered

BOT 4621 Plant Geography
BSC 2862 Global Change Ecology and Sustainability
BSC 3307C Climate Change Biology
BSC 4812C Evolutionary Biogeography
GLY 2080C Introduction to Marine Science
GLY 6075 Global Climate Change (graduate level, graduate fees apply, instructor permission needed)
FAS 4XXX Biology and Ecology of Algae
FAS 4XXX Marine Ecological Processes
FAS 4XXX Field Ecology of Aquatic Organisms
FAS 4XXX Coral Reef Ecology
FAS 4XXX Invasion Ecology of Aquatic Animals
FAS 4XXX Scientific Diving (Note: Basic Scuba and Advanced Scuba cannot be used as Focus courses)
FAS 4202C Biology of Fishes
FAS 4305C Introduction to Fishery Science
FAS 6337C Fish Population Dynamics (graduate level, graduate fees apply, instructor permission needed)
FOR 4934 Florida Forest Communities
PCB 3601C Plant Ecology
PCB 4043C General Ecology
PCB 4674 Evolution
SWS 4180 Earth System Analysis
VME 4906 Introduction to Marine Wildlife (ONLY one VME can be used as focus)
VME 4012 Aquatic Animal Conservation (ONLY one VME can be used as focus)
Any WIS-prefix course at the level of 3000+ not used elsewhere in student's program, such as:
 WIS 3434 Tropical Wildlife
 WIS 4454 Ecology of Bird Introductions and Invasions
 WIS 4547C Avian Field Research
 WIS 4570C Wildlife Behavior and Conservation
 WIS 4905 Individual Problems
 WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation

Other WIS Courses with Appropriate Ecology Focus

WIS 4934 Special Topics in Wildlife Ecology and Conservation, such as: Conservation of Amphibians & Reptiles, Invasion Ecology of Amphibians & Reptiles, Snake Biology, Stream Fish Ecology, Ecology of Bird Introductions, Climate Change Ecology, Coastal Disturbance Ecology, Coastal Conservation Biology, Global Change Ecology, Island Biology, Conservation Law Enforcement, Mammalogy (if not used for Vert. Common Requirement), Large Mammal Ecology & Management (if not used for Vert. Common Requirement), Avian Ecology & Conservation, Wetlands Management & Research, and Wildlife Behavior and Conservation
WIS 4905 UF in Australia (Summer A trip, odd years only) including:
 WIS 4905 Conservation of Australian Wildlife
 WIS 4905 Australian Vertebrate Biodiversity
WIS 4905 UF in New Zealand:
 WIS 4905 New Zealand Flora and Fauna (Summer B trip)
WIS 4905 UF in Swaziland:
 WIS 4905 African Savannah Wildlife Ecology (Summer A trip)

WIS 4905 Individual Problems
WIS 4911 Undergraduate Research/WEC
WIS 4915 Honors Thesis Research/WEC
WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation

ZOO 3513C Animal Behavior
ZOO 3603C Evolutionary Developmental Biology
ZOO 4307C Vertebrate Biodiversity (if not used for Vertebrate Common Requirement)
ZOO 4403C Marine Biology
ZOO 4926 Special Topics in Zoology (such as Scientific Illustration, Marine Biology)
ZOO 4926 Marine Ecology
ZOO 6406 Biology of Sea Turtles (graduate level, graduate fees apply, instructor permission needed)
ZOO 6468C Ichthyology (graduate level, graduate fees apply, instructor permission needed)

Approved Focus Courses in Management – you are responsible for researching when your focus course choices are offered

FAS 4305C Introduction to Fishery Science
FAS 4932 Scientific Diver (Note: Basic Scuba and Advanced Scuba cannot be used as Focus courses)
GLY 2080C Introduction to Marine Science
VME 4906 Introduction to Marine Wildlife (ONLY one VME 4906 may be used)
VME 4906 Aquatic Animal Conservation (ONLY one VME 4906 may be used)

Law, Economics and Policy

AEB 2451 Economics of Resource Use (Fall)
AEB 3450 Introduction to Natural Resource and Environmental Economics (Fall)
ECP 3302 Environmental Economics and Resource Policy (Fall & Spring)
FNR 4660C Natural Resource Policy and Administration (Fall)
FOR 3200C Foundations of Natural Resources and Conservation
FOR 4020 Seminar in Contemporary Issues in Forest Resources and Conservation
FOR 4060 Global Forests
FOR 4090C Urban Forestry
FOR 4541 Forest Economics
FOR 4621 Forest Economics and Management
PUP 3203 Environmental Law and Policy (Fall)

Planning and Design

EES 4050 Environmental Planning and Design
FNR 4623C Integrated Natural Resource Management (Fall)
FNR 4661 Spatial Models and Decision Analysis
FOR 4110 Ecology and Restoration of Longleaf Pine Ecosystems
FOR 4624C Forest Health Management
FOR 4670L Urban Forestry Applications
LEI 3250 Intro to Outdoor Recreation and Parks (Fall)
SWS 4244 Wetlands (Fall only)
SWS 4207 Sustainable Agricultural and Urban Land Management (online) (Fall)
URP Preview of Urban and Regional Planning (Fall & Spring)
WIS 4203C Landscape Ecology and Conservation (Spring)

Implementation Procedures

FNR 3131C Dendrology/Forest Plants
FNR 3410C Natural Resource Sampling
FNR 4343C Forest Water Resources
FNR 4345 Models for Water Resources
FOR 3162C Silviculture
FOR 3214 & FOR 3214L Fire Ecology and Management & Lab
FOR 3342C Tree Biology
FOR 3430C Forest Mensuration
FOR 3434C Forest Resources Information Systems
FOR 3855 Agroforestry in the Southeast US
FOR 4854 Agroforestry
FOR 3434C Forest Resources Information Systems (Summer B)
FOR 4165 Regional Silviculture
GIS 3043 Foundations of Geographical Information Systems (Fall, Spring & Summer A)
GIS 3072C (formerly SUR 3393 & SUR 3393L) Geographic Information Systems (Fall)
GIS 4021C Air Photo Interpretation (Spring)
Any SUR-prefix course taught at the 3000-level or higher
URP 4273 Survey of Planning Information Systems (Fall & Spring)
WIS 4427C Wildlife Habitat Management (Spring)
WIS 45470C Wildlife Behavior and Conservation

WIS Courses with Appropriate Management Focus

WIS 4934 Topics in Wildlife Ecology and Conservation including:
 WIS 4934 Coastal Conservation Biology (Summer semester)
 WIS 4934/WIS 4507C Wildlife Behavior and Conservation,
 WIS 4934/WIS 3404 Natural Resources Law Enforcement
 WIS 4934 Wetlands Management & Research
 WIS 4934 Large Mammal Ecology and Management
WIS 4905 UF in New Zealand:
 WIS 4905 Biodiversity Conservation and Management (Summer B trip)
WIS 4905 UF in Swaziland:
 WIS 4905 Conservation, Culture and Management (Summer A trip)
WIS 4905 Individual Problems
WIS 4911 Undergraduate Research/WEC
WIS 4915 Honors Thesis Research/WECWIS
WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation

Approved Focus Courses in Human Dimensions – you are responsible for researching when your focus course choices are offered

Policy, Economics and Ethics

AEB 2451 Economics of Resource Use (Fall)
AEB 3450 Intro to Natural Resource and Environmental Economics (Fall)
AEB 4126 Agricultural and Natural Resource Ethics (Fall & Spring)
AEB 4283 International Development Policy (Fall & Spring)
AEB 4452 Advanced Natural Resource & Environmental Economics
ECP 3302 Environmental Economics and Resource Policy (Fall & Spring)
FNR 4660C Natural Resource Policy and Administration (Fall)
FOR 3202 Society and Natural Resources (Spring) (if not used for HD Common Requirement)
GEA 3600 Geography of Africa
INR 4350 International Environmental Relations (Fall & Spring)
PHM 3032 Ethics and Ecology
PUP 3203 Environmental Law and Policy (Fall)
PUP 3204 Politics and Ecology (Fall & Spring)
PUP 4008 Analyzing Public Policy (Fall & Spring)
POT 3503 Environmental Ethics and Policy (Fall)
WIS 4523 Human Dimensions of Natural Resource Conservation (Fall) (if not used for HD Common Requirement)

Environmental Education and Communication

AEE 3070C Digital Media Products in Agriculture and Natural Resources (Fall)
AEE 3073 Intercultural Communication (Fall & Spring)
AEC 3414 Leadership Development in Agriculture and Natural Resources (Fall & Spring)
AEE 4035 Advanced Agricultural Communication Writing (Spring)
AEE 4036 Advanced Agricultural Communication Production (Spring)
FNR 4040C Natural Resource Communication
FOR 4070C Environmental Education Program Development (Fall)
SCE 4342 Environmental Education Methods and Materials
SPC 3602 Advanced Public Speaking (Spring)
BOT 4926 Scientific Illustration

Environmental Planning and Management

EES 4050 Environmental Planning and Design
FNR 4623C Integrative Natural Resource Management (Fall)
FOR 4664 Sustainable Ecotourism Development (Fall)
GEO 4554 Regional Development (Spring)
LEI 3250 Intro to Outdoor Recreation and Parks (Fall)
LEI 3546 Park Management (Spring)
LEI 4833 Ecotourism
URP 4000 Preview of Urban and Regional Planning (Fall & Spring)

WIS Courses with Appropriate Human Dimensions Focus

WIS 4934 Topics in Wildlife Ecology and Conservation
WIS 4905 Individual Problems
WIS 4911 Undergraduate Research/WEC
WIS 4915 Honors Thesis Research/WEC
WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation

Approved Focus Courses in Quantitative Science – you are responsible for researching when your focus course choices are offered

Mathematics, Modeling and Statistics

FAS 4XXX Applied Fisheries Statistics
MAC 2313 Analytic Geometry and Calculus 3 (Fall & Spring)
MAD 4401 Intro to Numerical Analysis (Fall & Spring)
MAP 2302 Elementary Differential Equations (Fall & Spring)
MAP 4101 Probability Theory and Stochastic Processes 1
MAP 4102 Probability Theory and Stochastic Processes 2 (Spring)
MAS 3114 Computational Linear Algebra (Fall & Spring)
MAS 4105 Linear Algebra 1 (Fall & Spring)
STA 4210 Regression Analysis (Fall)
STA 4211 Design of Experiments
STA 4222 Sample Survey Design
STA 4321 Intro to Probability (Fall & Spring)
STA 4504 Categorical Data Analysis (Spring)
STA 4702 Multivariate Statistical Methods

Computer Programming and Networks

CAP 4800 Systems Simulation (Fall)
CIS 3020 Intro to CIS (Spring)
COP 3530 Data Structures and Algorithm (Fall & Spring)
COP 4331 Object-oriented Programming (Spring)
COT 3100 Applications of Discrete Structures (Fall & Spring)
COT 4501 Numerical Analysis – A Computational Approach (Fall & Spring)

GIS and Remote Sensing

EES 4027 Spatial Analysis Using GIS
GEO 3162C Intro to Quantitative Analysis for Geographers (Fall & Spring)
GEO 4167C Intermediate Quantitative Analysis for Geographers (Spring)
GIS 3043 Foundations of Geographical Information Systems (Fall, Spring & Summer A)
GIS 3072C (formerly SUR 3393 & SUR 3393L) Geographic Information Systems (Fall)
GIS 4120C Air Photo Interpretation (Spring)
SUR 3331 & SUR 3331L Photogrammetry & Lab (Spring)
SUR 4380 Remote Sensing (Spring)
URP 4273 Survey of Planning and Information Systems (Fall & Spring)

WIS & Other Courses with Appropriate Quantitative Focus

WIS 4934 Topics in Wildlife Ecology and Conservation (such as Biometry)
WIS 4905 Individual Problems
WIS 4911 Undergraduate Research/WEC
WIS 4915 Honors Thesis Research/WEC
WIS 4941 Practical Work Experience in Wildlife Ecology and Conservation
SWS 4180 Earth System Analysis

Approved Focus Courses in TWS Certification – you are responsible for researching when your focus course choices are offered

You may select any courses necessary to fulfill the requirements for Certification by The Wildlife Society as an Associate Wildlife Biologist (<http://wildlife.org/wp-content/uploads/2014/05/AWB-Certification-November-2016-restricted.pdf>). The core WEC curriculum satisfies many of the requirements. However, choices made for Common Requirements may require additional courses in a particular area, and testing out of courses with AP, I, etc. type courses may also require that these course be taken again (as TWS does not accept high school coursework even if UF gave you credit). Certification is not required to obtain your degree/graduate. A degree is not required for certification, only the appropriate combination of courses. Courses need not be taken at UF for certification, but UF requires most courses be taken at UF to fulfill the degree (particularly the final 30 credits of your degree). Below are the course requirements for certification with suggestions. The link above is to the actual TWS Certification Application. Credits from individual course may be split among various sections/requirements as long as they meet the criteria.

We strongly recommend that you read and pay close attention to the course requirements on TWS Associate Wildlife Biologist application (see above URL) form before choosing this focus area. There are several specific course requirements that must be adhered to in order to fulfill certification requirements. Decisions on course substitutions are made by a TWS board, and NOT UF's Wildlife Ecology and Conservation Department. For questions about substitutions and other inquires please contact Ms. Jamila Blake at certification@wildlife.org or by phone 301-897-9770, ext. 307.

Wildlife Management, minimum 6 credit hours

WIS 3401 Wildlife Ecology and Management will fulfill 3 credit hours

Currently, the only other WIS course that will fulfill this requirement is WIS 4427 C Wildlife Habitat Management (spring semester). Courses in FOR and FNR that emphasize land/natural resource management and very applied and hands-on may work.

Wildlife Biology, minimum 6 credit hours

WIS 3402 Wildlife of Florida will fulfill 3 credit hours (at least currently)

The other 3 credits **MUST** be fulfilled by completing WIS 4934/ZOO 4926 Mammalogy, ZOO 4427C Avian Biology, or ZOO 4926 – Herpetology, which you may have completed when fulfilling your Wildlife Biology Common Requirement above.

Ecology, minimum 3 credit hours

You fulfilled this requirement by completing your Ecology Common Required above.

Zoology, minimum 9 credit hours

Courses in the taxonomy, biology, behavior, physiology, anatomy, and natural history of vertebrates and invertebrates are needed here. Courses in genetics, nutrition, physiology, disease, and other biology or general zoology courses are accepted as are Ichthyology or fisheries biology courses.

EITHER BIO 2010/L **OR** BIO 2011/L can be used for 4 credits (the course not used here can be used for Botany below; if you tested out of either of these then you need to find the credits elsewhere).

Any ZOO courses and some BIO (including any lower level/prep General BIO courses, ENY, and ZOO courses that you are already completing will also work here.

Botany, minimum 9 credit hours

Courses in general botany, plant anatomy, plant genetics, plant morphology, plant taxonomy, plant physiology, and other botany courses. Only one of the following courses is accepted: dendrology, silvics, or silviculture.

EITHER BIO 2010/L **OR** BIO 2011/L can be used for 4 credits (the course not used here can be used for Zoology above; if you tested out of either of these then you need to find the credits elsewhere).

The two courses taken to fulfill your Plant Diversity & Taxonomy Common Requirement above will normally fulfill 6 credits here

Any BOT courses and some FOR/FNR courses will work. If you are using PCB 3601C - Plant Ecology to fulfill the Ecology requirement above, it **CANNOT** also be used here.

Physical Sciences, minimum 9 credit hours

Includes courses such as chemistry, physics, geology, or soils with at least two disciplines represented.

SWS 3022/L Introduction to Soils in the Environment and Lab can be used for 4 credits

CHM 2045/L General Chemistry and Lab can be used for 4 credits

After these two required courses, you need 1 more credit. Any other courses in the disciplines listed above will work here. A one credit course that works is GLY 1150L Florida Geology Lab.

Basic Statistics, minimum 3 credit hours

You fulfilled this requirement by completing your required STA 2023 Introduction to Statistics I course.

Quantitative Sciences, minimum 6 credit hours

Courses in calculus, biometry, advanced algebra, systems analysis, mathematical modeling, sampling, computer science, or other quantitative science. Elementary algebra, introductory algebra, algebra, introductory GIS, and introductory personal computing classes do not count.

You fulfilled this requirement by completing your required MAC 2311 Analytical Geometry and Calculus I and WIS 4601C Quantitative Wildlife Ecology courses.

Humanities and Social Sciences, minimum 9 credit hours

Courses such as economics, sociology, physiology, political science, government, history, literature, or foreign language.

Usually, completing your General Education and CALS required courses fulfills all nine of these credits. You should check, particularly if you tested out of some of these.

Communications, minimum 12 credit hours

Courses designed to improve communication skills such as English composition, technical writing, journalism, public speaking, or use of mass media.

Usually, completing your General Education and CALS required courses fulfills all nine of these credits. You should check, particularly if you tested out of some of these.

Policy, Administration, and Law, minimum 6 credit hours

Courses that demonstrate significant content or focus on natural resource policy and/or administration, wildlife or environmental law, or natural resource/land use planning will apply in addition to courses that document contributions to the understanding of social, political, and ethical decisions for wildlife and natural resources management. Courses you are using to fulfill your Human Dimension Common Requirement will **NOT** work here. WIS 4934 Conservation Law Enforcement will **NOT** work here.

The course you take to complete your Natural Resource Policy Common Requirement, which is usually FNR 4660C Natural Resource Policy & Administration, can be used for 3 credits. The FOR 3202 Society and Natural Resources option to complete your Human Dimensions Common Requirement can be used for 3 credits (TWS Certification Review Board recently approved this course; however, you may need to reference an email from them in your application-see Dr. Steve Johnson)

Other courses that will work include ECP 3302 Environmental Economics and Resource Policy, EES 4050 Environmental Planning and Design, PHM 3032 Ethics and Ecology, POT 3503 Environmental Ethics and Policy, PUP 3203 Environmental Law and Policy, and PUP 3204 Politics and Ecology; and AEB 4126 Agricultural and Natural Resource Ethics may work here (not reviewed by TWS yet).

Approved Focus Courses in Wildlife [Cooperative Education](#) – you are responsible for researching and securing the internship experience that will fulfill this Focus requirement.

Completing this focus area will include enrolling in 12 credits of WIS 4941 Internship in Wildlife Ecology and Conservation during a one semester, and working for a wildlife/natural resource agency or NGO fulltime (>40 hrs/week) for 16 weeks during that semester. The WEC contract that describes the work to be completed and contact information for the student's supervisor will be completed and approved by the WEC Undergraduate Coordinator before enrolling in the course. This WEC contract form is found on <http://wec.ufl.edu/undergrad/forms.php>.

IMPORTANT: Your internship must be approved and you must be registered for WIS 4941 credits before you can count this experiential learning towards your WEC Focus requirement. Credit for wildlife internship experience cannot be earned retroactively or after the fact. Be sure you are registered in WIS 4941 before beginning your internship.

The Department of Wildlife Ecology and Conservation does not provide internships, but can assist students in finding appropriate opportunities. It is the student's responsibility to locate and secure internships, which then must be approved by the WEC Undergraduate Coordinator (Dr. Steve Johnson).

Approved Focus Courses in [Urban and Regional Planning](#) to fulfill Dual Degree Requirements

Recently WEC Faculty met with the Department of Urban and Regional Planning to discuss the possibility of WEC undergraduates pursuing a combined degree (Baccalaureate of Science in Wildlife Ecology and Conservation and a Master of Arts in Urban and Regional Planning in URP) in a five-year program. Students who satisfy the requirements for the M.A. in URP will further be eligible to pursue various certifications as professional planners. The URP M.A. requires a total of 52 graduate credits and in order to satisfy this requirement, URP requires that Undergraduates complete 21 of these graduate credits during their undergraduate curriculum.

Students selecting the Urban and Regional Planning Focus Area are required to complete 21 credit hours of "Focus" courses and these could cover the 21 graduate credits ([6000 level or above](#)) required by URP in the undergraduate portion of this combined degree program. Dr. Latimer assured us that undergraduates can master these courses and certainly will not be at any disadvantage compared to URP graduate students in the program. Upon graduation from the undergraduate portion of this program, students will have to satisfy 31 additional graduate credits in URP in the next year, with 6 of these credits being designated for the thesis.

We recommend that students pursuing this combined degree program follow the Fall 2011 Conservation Specialization and elect 21 graduate credits required by URP as their focus coursework.

Students must be advised by both a WEC faculty member and Dr. Stanley Latimer (431 Architecture).